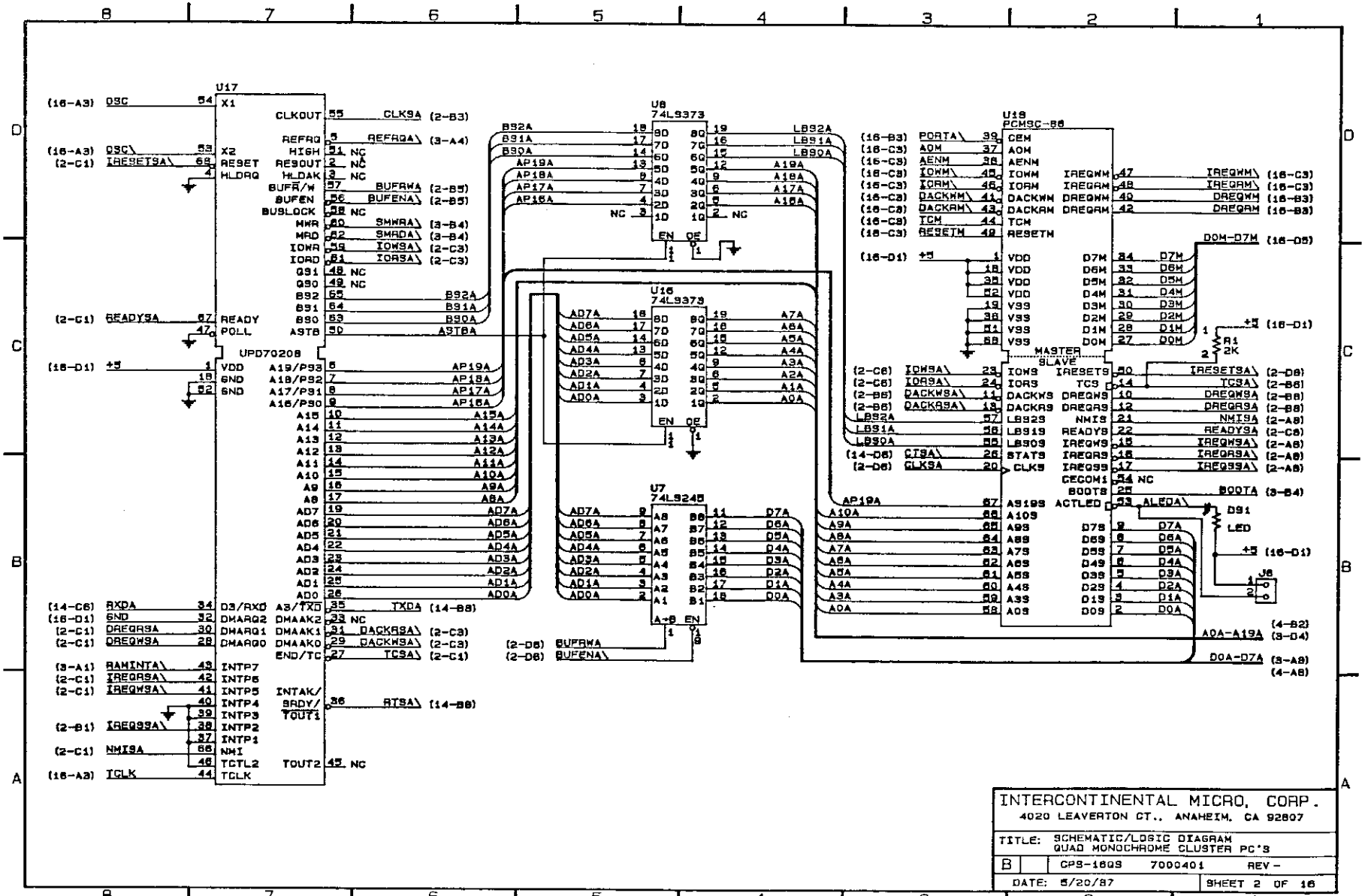
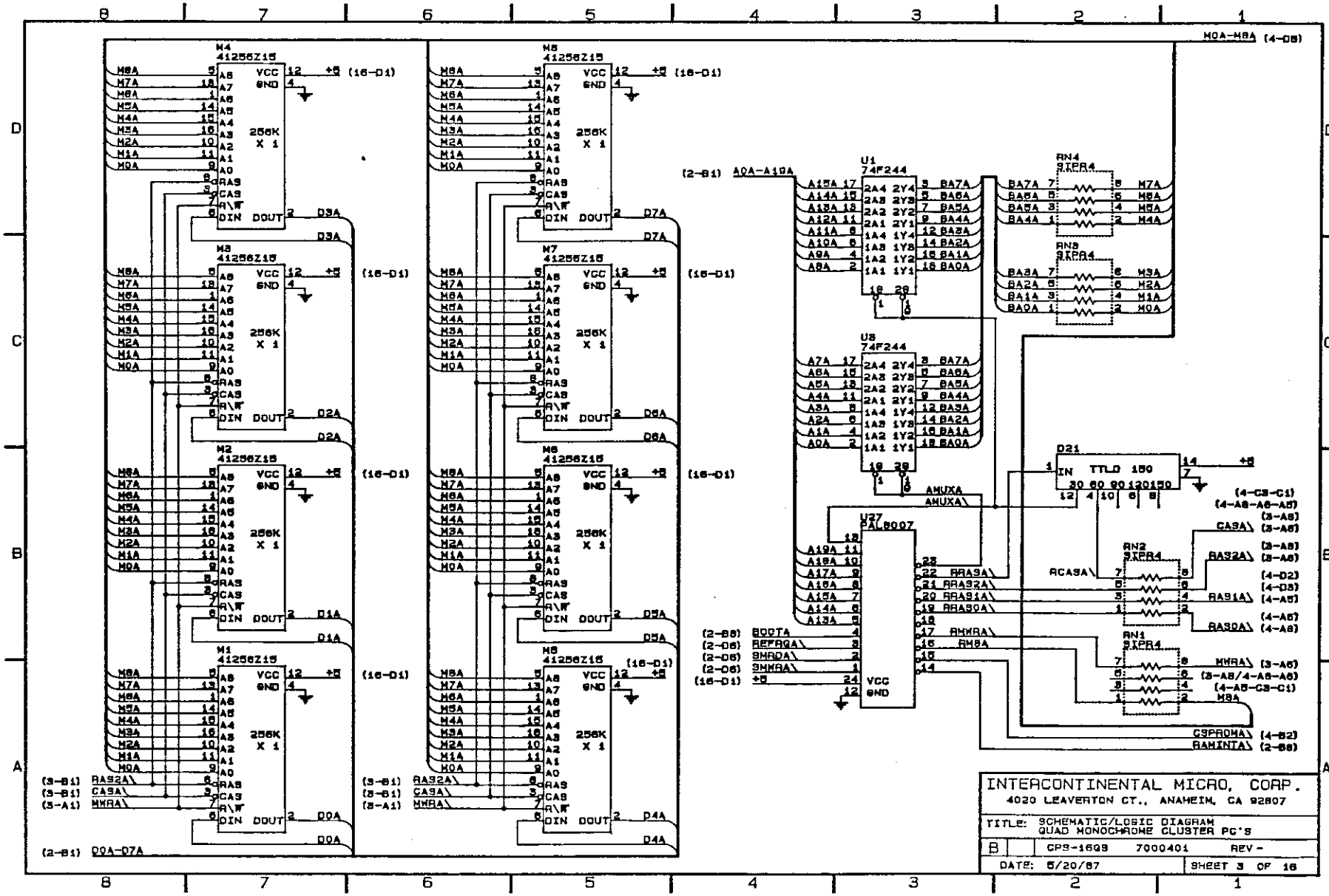
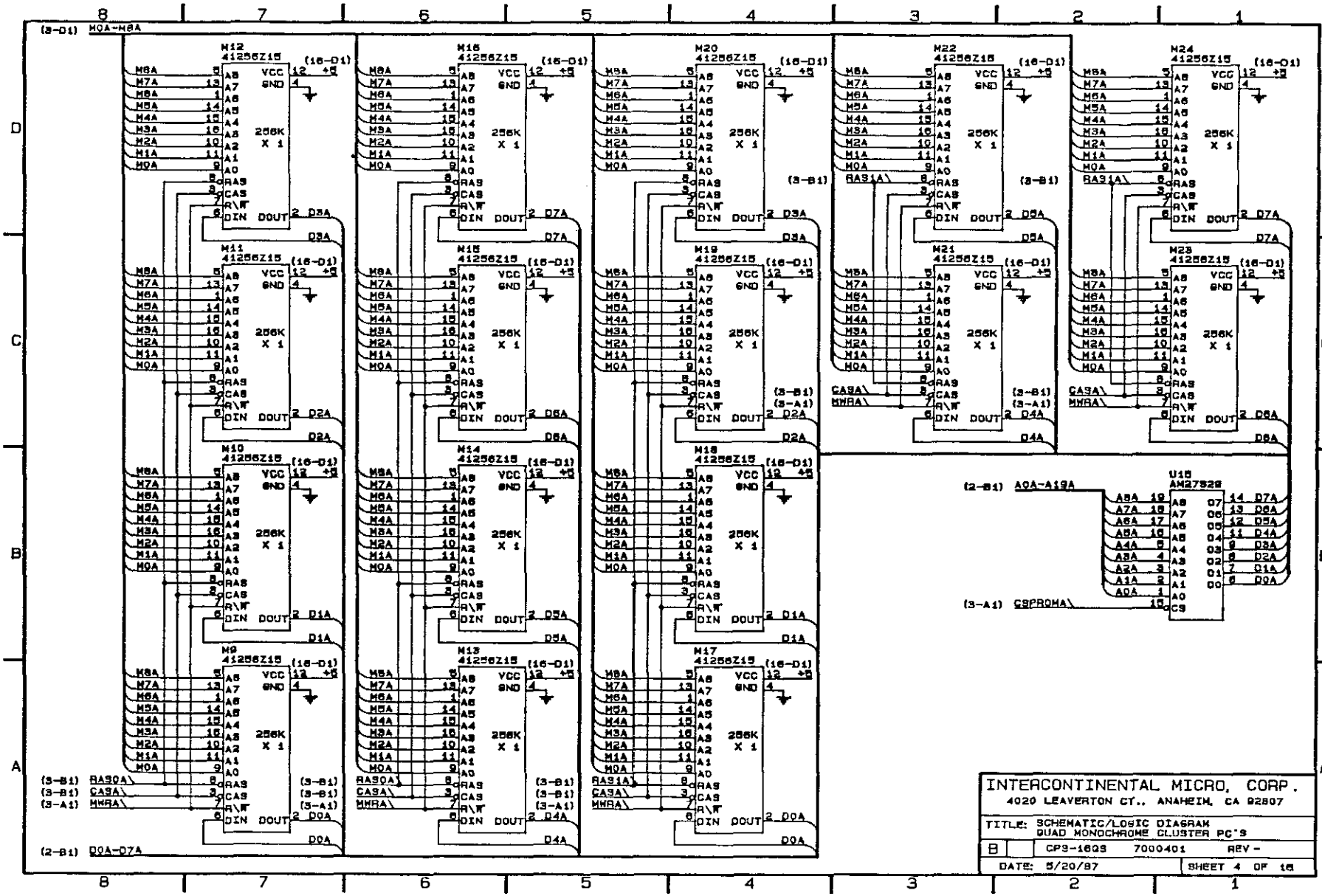
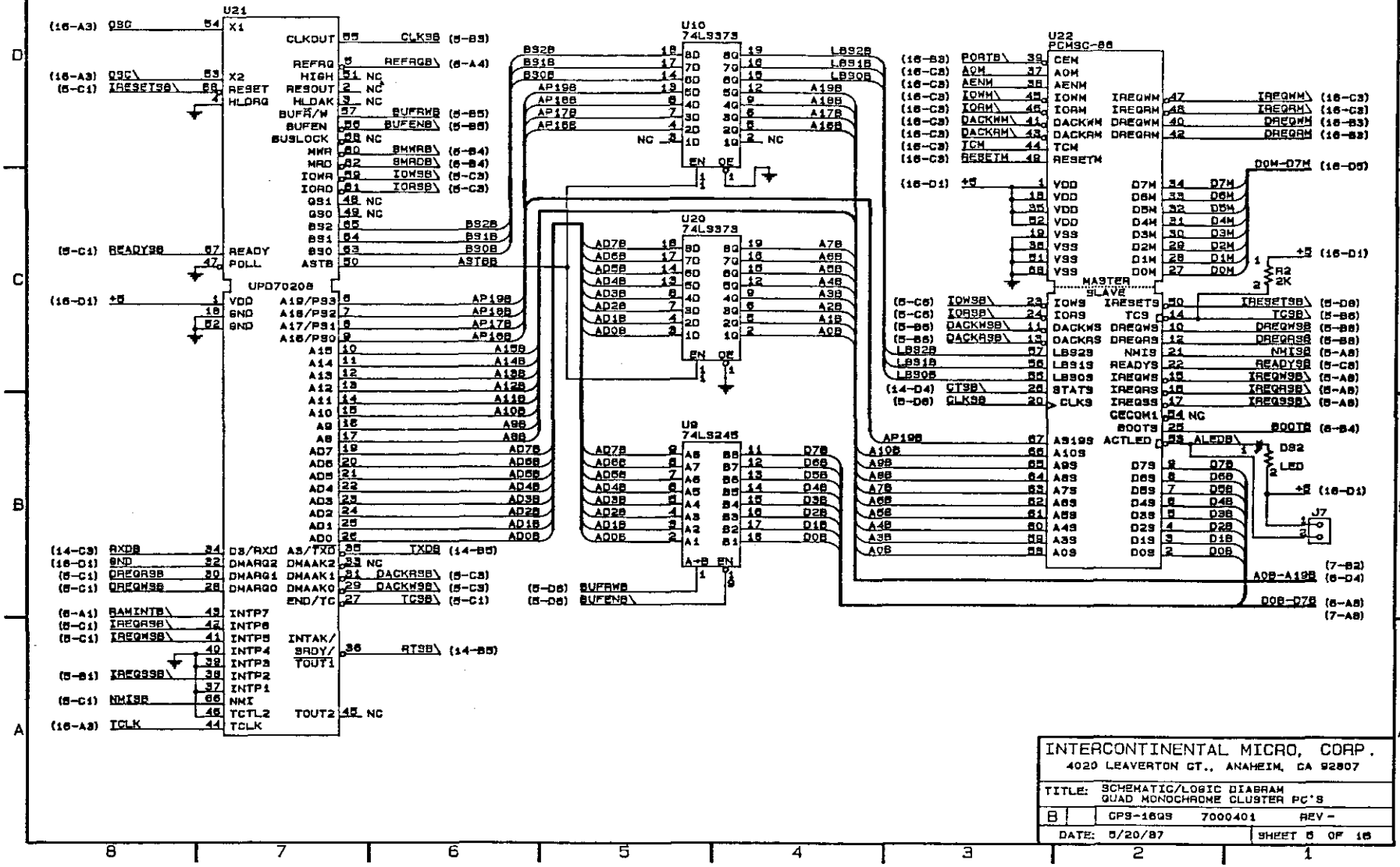

U17
UPD70208
U8
74LS373
U16
74LS373
U7
74LS245
U18
PCM9C-86
MASTER
SLAVE
INTERCONTINENTAL MICRO, CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807
TITLE: SCHEMATIC/LOGIC DIAGRAM
QUAD MONOCHROME CLUSTER PC'S
B CPS-1608 7000401 REV -
DATE: 5/20/87
SHEET 2 OF 16


M4 41256Z15
M5 41256Z15
M3 41256Z15
M7 41256Z15
M2 41256Z15
M6 41256Z15
M1 41256Z15
M8 41256Z15
256K X 1
VCC
GND
DIN
DOUT
RAS
CAS
R\W
U1 74F244
U8 74F244
U27 PAL8007
D21 TTL 150
RN4 9IPR4
RN3 9IPR4
RN2 9IPR4
RN1 9IPR4
M0A-M8A (4-D8)
A0A-A10A (2-B1)
D0A-D7A (2-B1)
INTERCONTINENTAL MICRO, CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807
TITLE: SCHEMATIC/LOGIC DIAGRAM
QUAD MONOCHROME CLUSTER PC'S
CPS-1698 7000401 REV -
DATE: 5/20/87
SHEET 3 OF 16



INTERCONTINENTAL MICRO, CORP. 4020 LEAVERTON CT., ANAHEIM, CA 92807		
TITLE: SCHEMATIC/LOGIC DIAGRAM QUAD MONOCHROME CLUSTER PC'S		
B	CP3-1605 7000401	REV -
DATE: 5/20/87		SHEET 4 OF 16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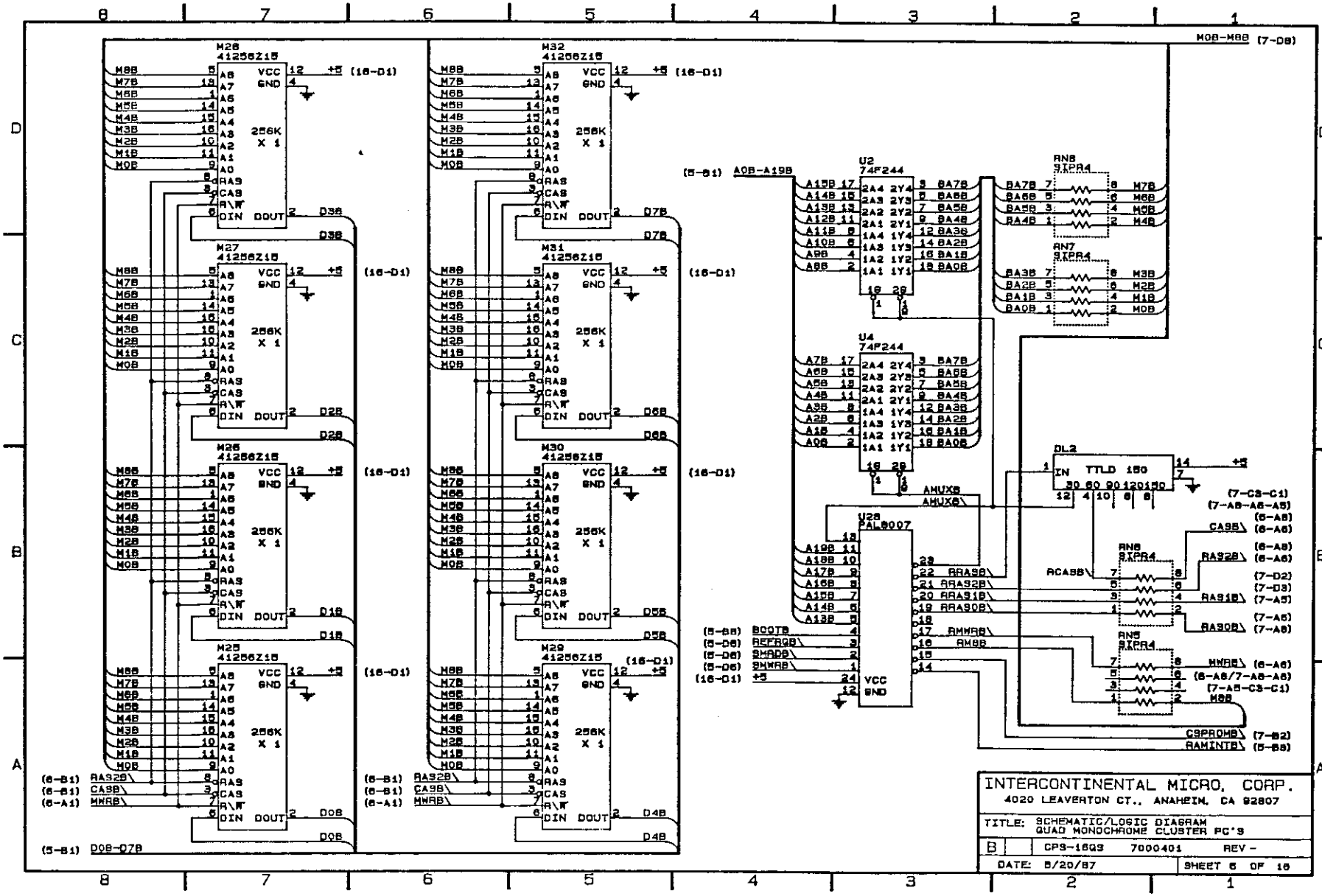
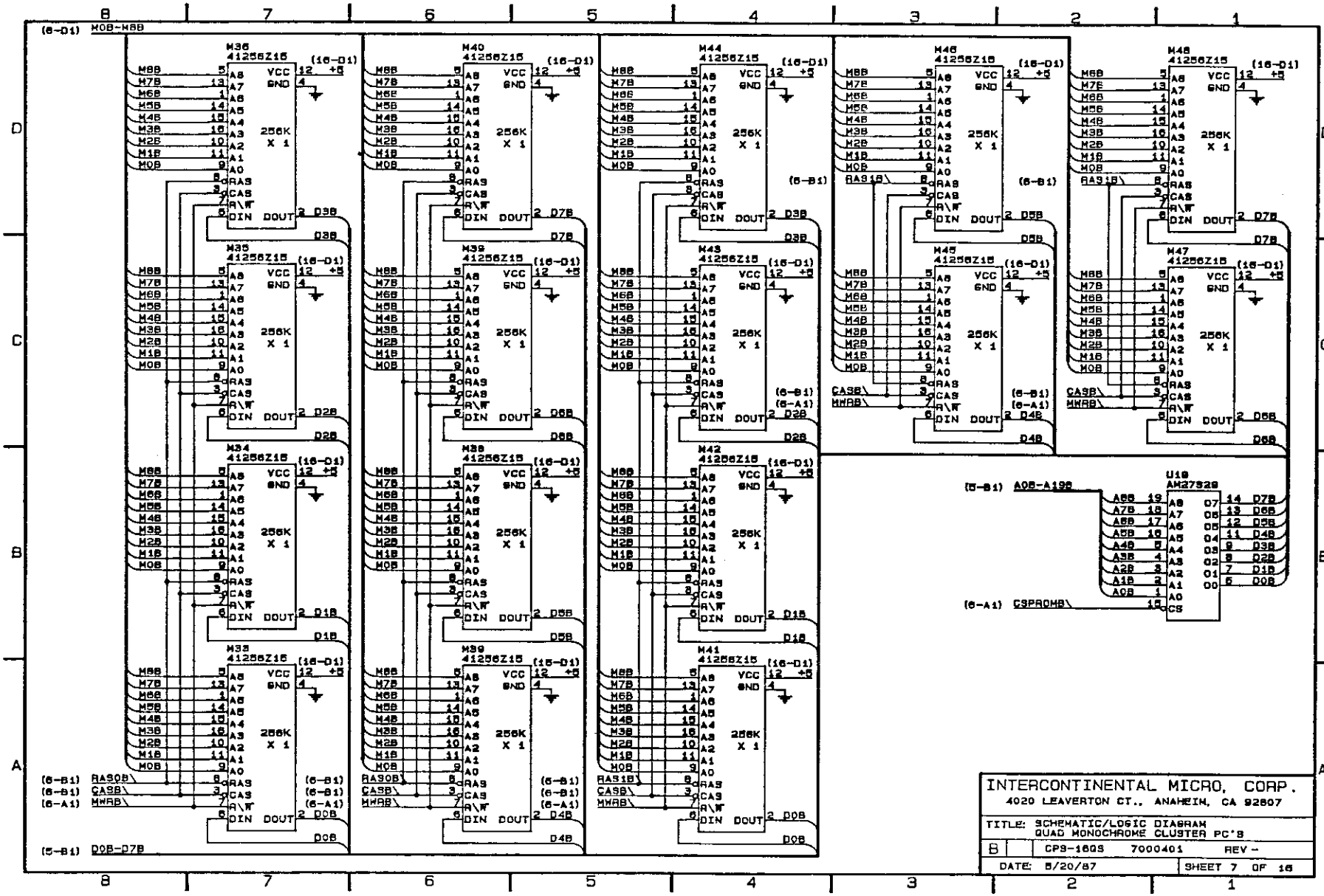
UPD70208
U10
74LS373
U20
74LS373
U9
74LS245
U22
PCMSC-88
MASTER
SLAVE
INTERCONTINENTAL MICRO, CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807
TITLE: SCHEMATIC/LOGIC DIABRAM
QUAD MONOCHROME CLUSTER PC'S
B
CPS-1609 7000401 REV -
DATE: 5/20/87
SHEET 6 OF 16


M08-M88 (7-D8)
M26 41256Z15
M27 41256Z15
M25 41256Z15
M32 41256Z15
M31 41256Z15
M30 41256Z15
M29 41256Z15
256K X 1
U2 74F244
U4 74F244
U28 PAL9007
RN8 9IPR4
RN7 9IPR4
RN6 9IPR4
RN5 9IPR4
DL2 TTLD 150
AMUXB
AMUXB\
CASB\
RAS2B\
RAS1B\
RAS0B\
RCASB\
MWRB\
CSPROMB\
RAMINTB\
INTERCONTINENTAL MICRO, CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807
TITLE: SCHEMATIC/LOGIC DIAGRAM
QUAD MONOCHROME CLUSTER PC'S
B CPS-16Q3 7000401 REV -
DATE: 5/20/87 SHEET 6 OF 16


(6-D1) M0B-M8B
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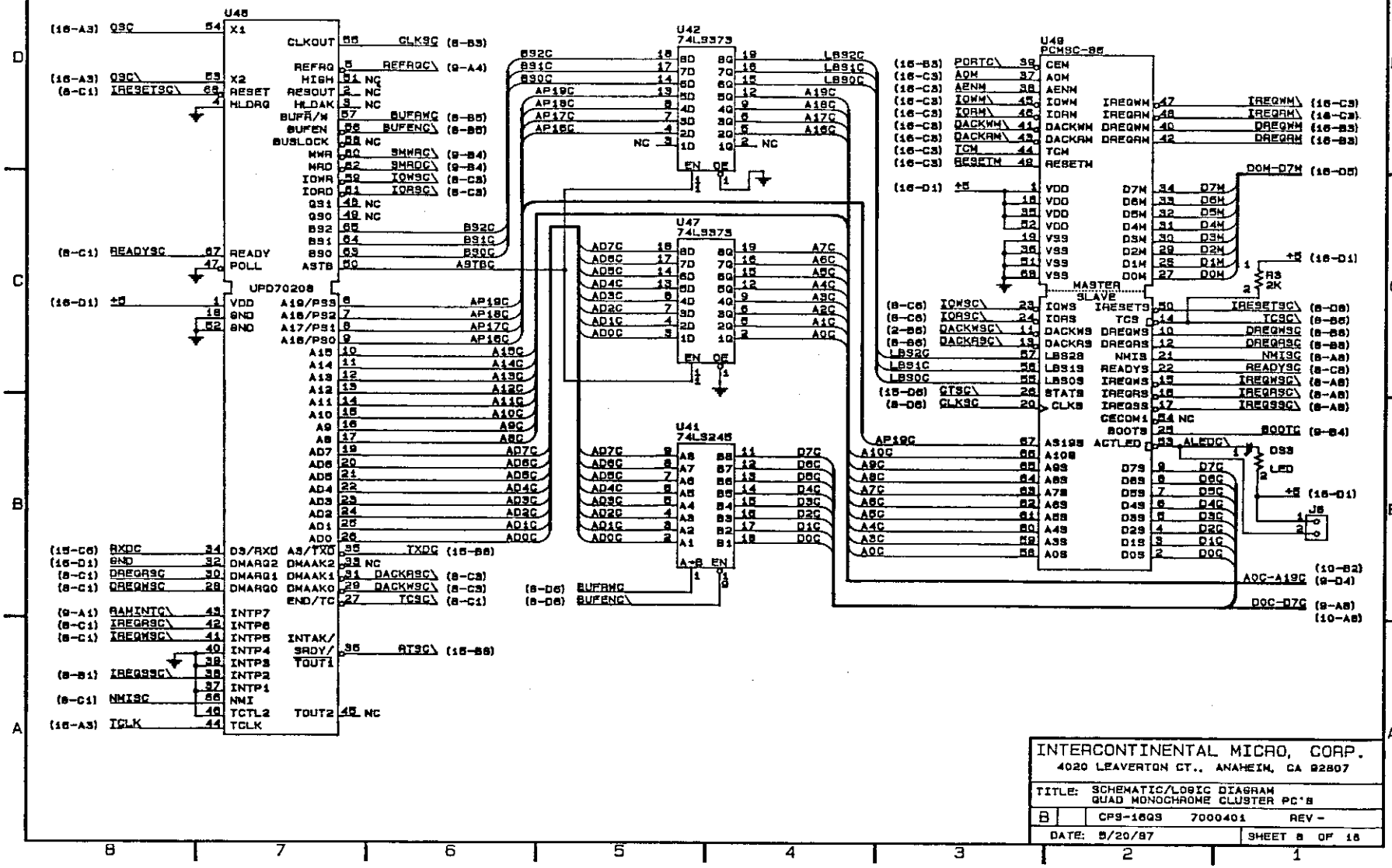
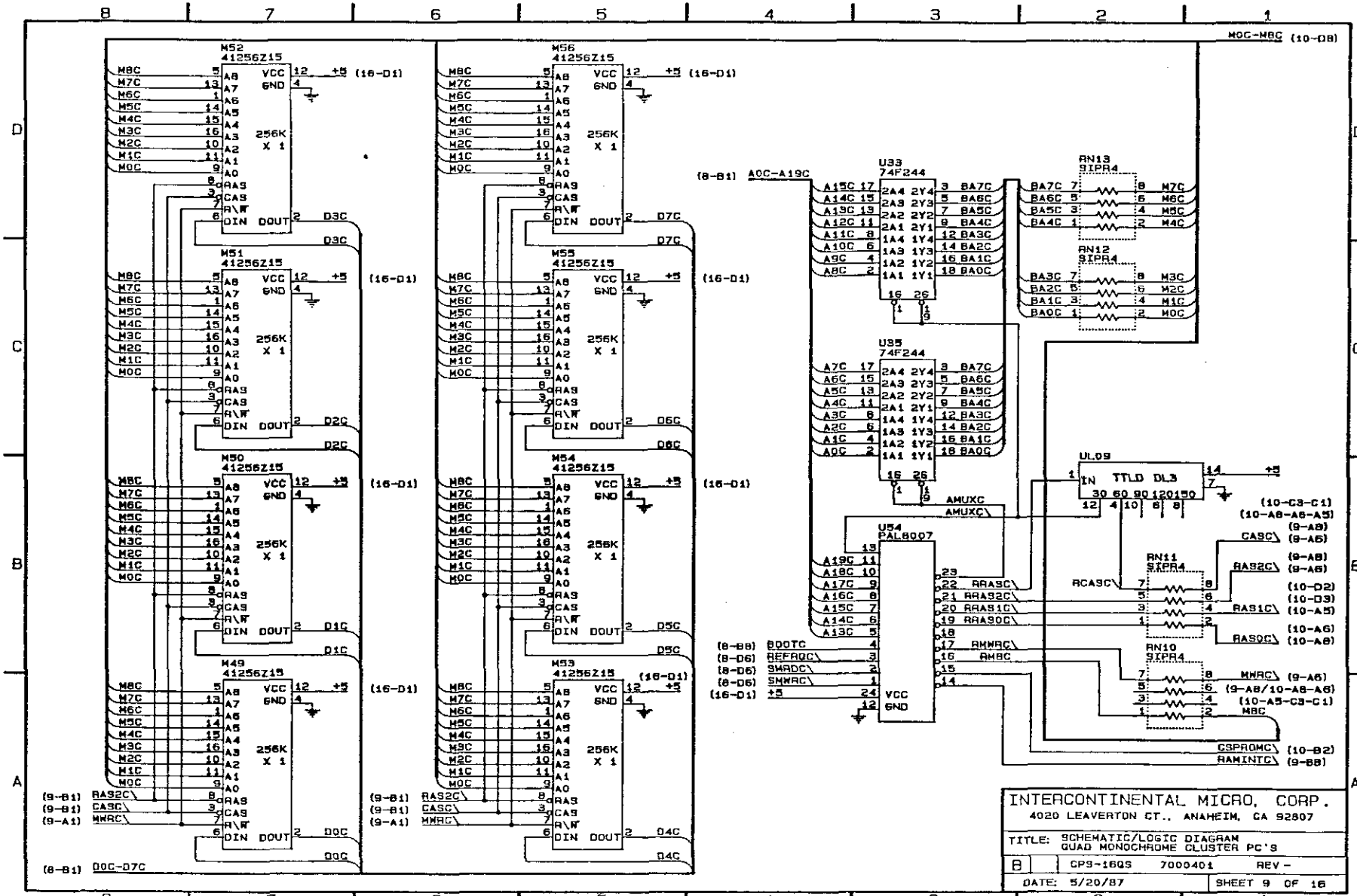
M35 41256Z15 (16-D1)
M34 41256Z15 (16-D1)
M33 41256Z15 (16-D1)
M40 41256Z15 (16-D1)
M39 41256Z15 (16-D1)
M38 41256Z15 (16-D1)
M37 41256Z15 (16-D1)
M44 41256Z15 (16-D1)
M43 41256Z15 (16-D1)
M42 41256Z15 (16-D1)
M41 41256Z15 (16-D1)
M46 41256Z15 (16-D1)
M45 41256Z15 (16-D1)
M48 41256Z15 (16-D1)
M47 41256Z15 (16-D1)
VCC +5
GND
256K X 1
A8 A7 A6 A5 A4 A3 A2 A1 A0
RAS CAS R\W DIN DOUT
D3B D2B D1B D0B D7B D6B D5B D4B
RAS0B\ CAS0\ MWRB\
RAS1B\ CAS1B\
(6-B1) (6-A1)
(6-B1) D0B-D7B
U19 AM27S29
(6-B1) A0B-A19B
(6-A1) CSPROMB\
INTERCONTINENTAL MICRO, CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807
TITLE: SCHEMATIC/LOGIC DIAGRAM
QUAD MONOCHROME CLUSTER PC'S
B CPS-1603 7000401 REV -
DATE: 5/20/87 SHEET 7 OF 16


U45
UPD70208
U42
74LS373
U47
74LS373
U41
74LS245
U49
PCM9C-86
MASTER
SLAVE
INTERCONTINENTAL MICRO, CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807
TITLE: SCHEMATIC/LOGIC DIAGRAM
QUAD MONOCHROME CLUSTER PC'S
CPS-16QS 7000401 REV -
DATE: 5/20/87
SHEET 8 OF 16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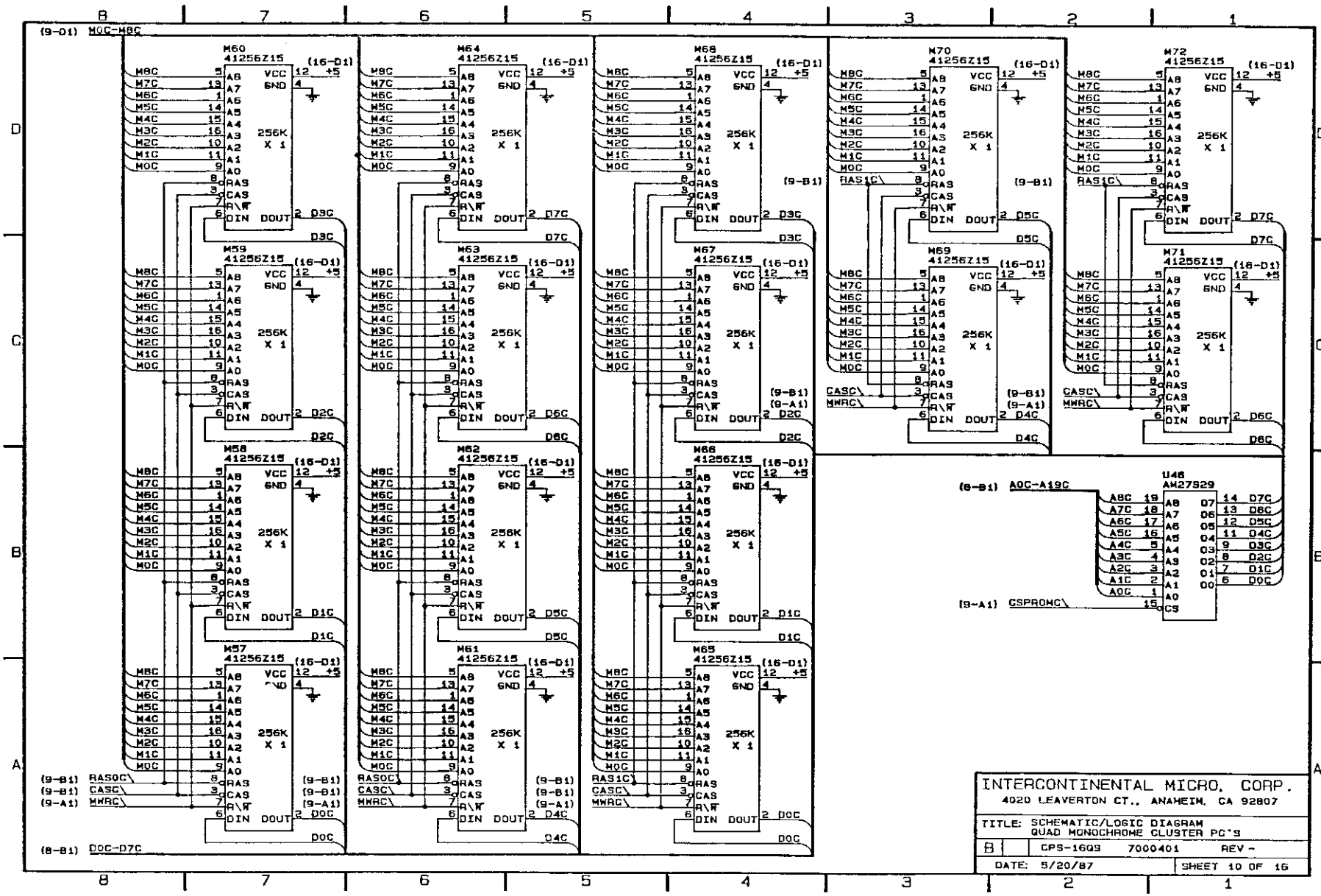
41256Z15
M51
41256Z15
M50
41256Z15
M49
41256Z15
M56
41256Z15
M55
41256Z15
M54
41256Z15
M53
41256Z15
256K X 1
VCC
GND
DIN
DOUT
RAS
CAS
R\W
M0C-M8C (10-D8)
(16-D1)
(8-B1) A0C-A19C
U33
74F244
U35
74F244
U54
PAL8007
U109
TTLD DL3
30 60 90 120 150
AMUXC
AMUXC\
BOOTC
REFRQC\
SMADC\
SMWRC\
RRASC\
RRAS2C\
RRAS1C\
RRAS0C\
RMWRC\
RMBC
RCASC\
RN13
SIPR4
RN12
SIPR4
RN11
SIPR4
RN10
SIPR4
RAS2C\
CASC\
MWRC\
CSPROMC\
RAMINTC\
INTERCONTINENTAL MICRO, CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807
TITLE: SCHEMATIC/LOGIC DIAGRAM
QUAD MONOCHROME CLUSTER PC'S
B
CPS-16QS
7000401
REV -
DATE: 5/20/87
SHEET 9 OF 16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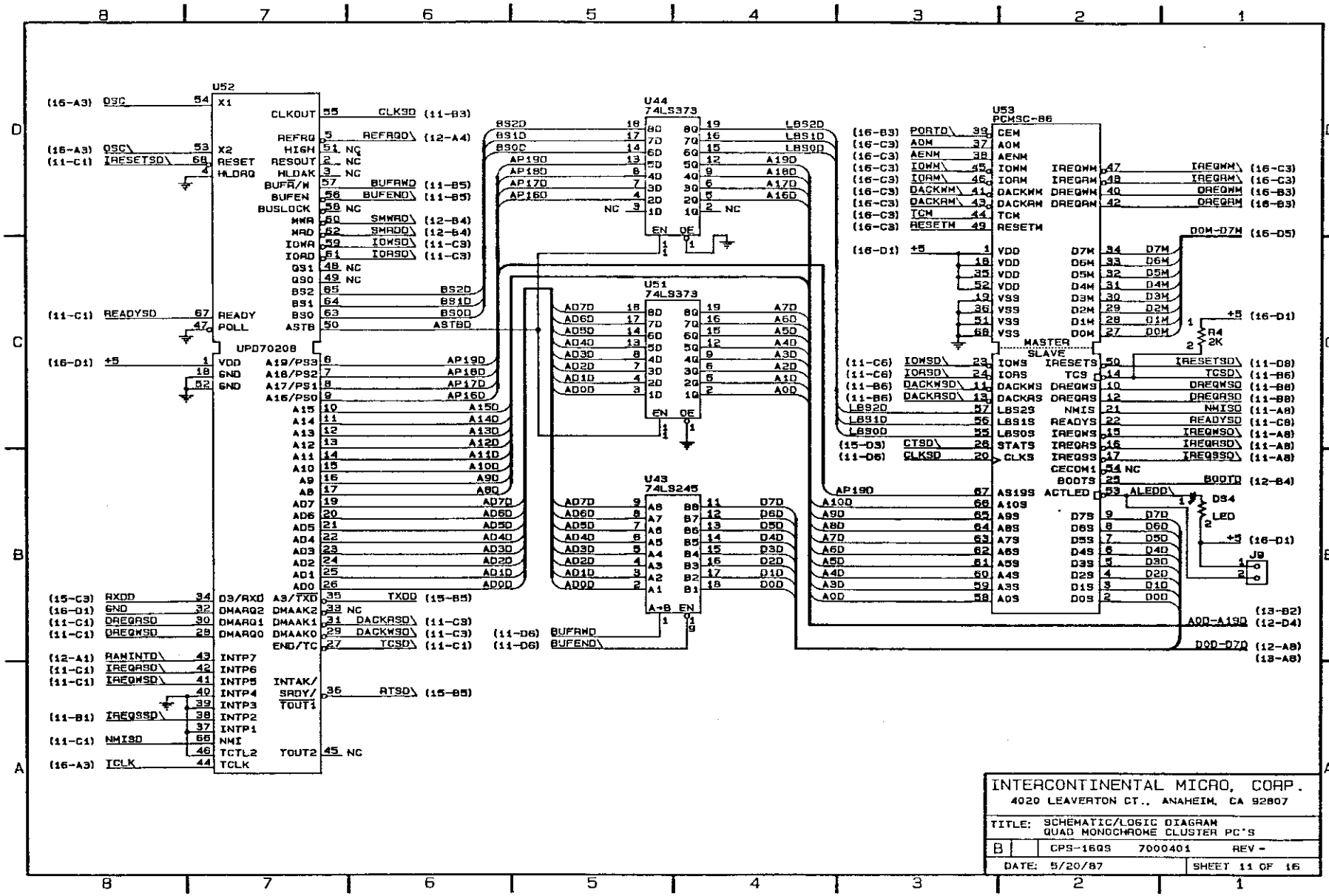
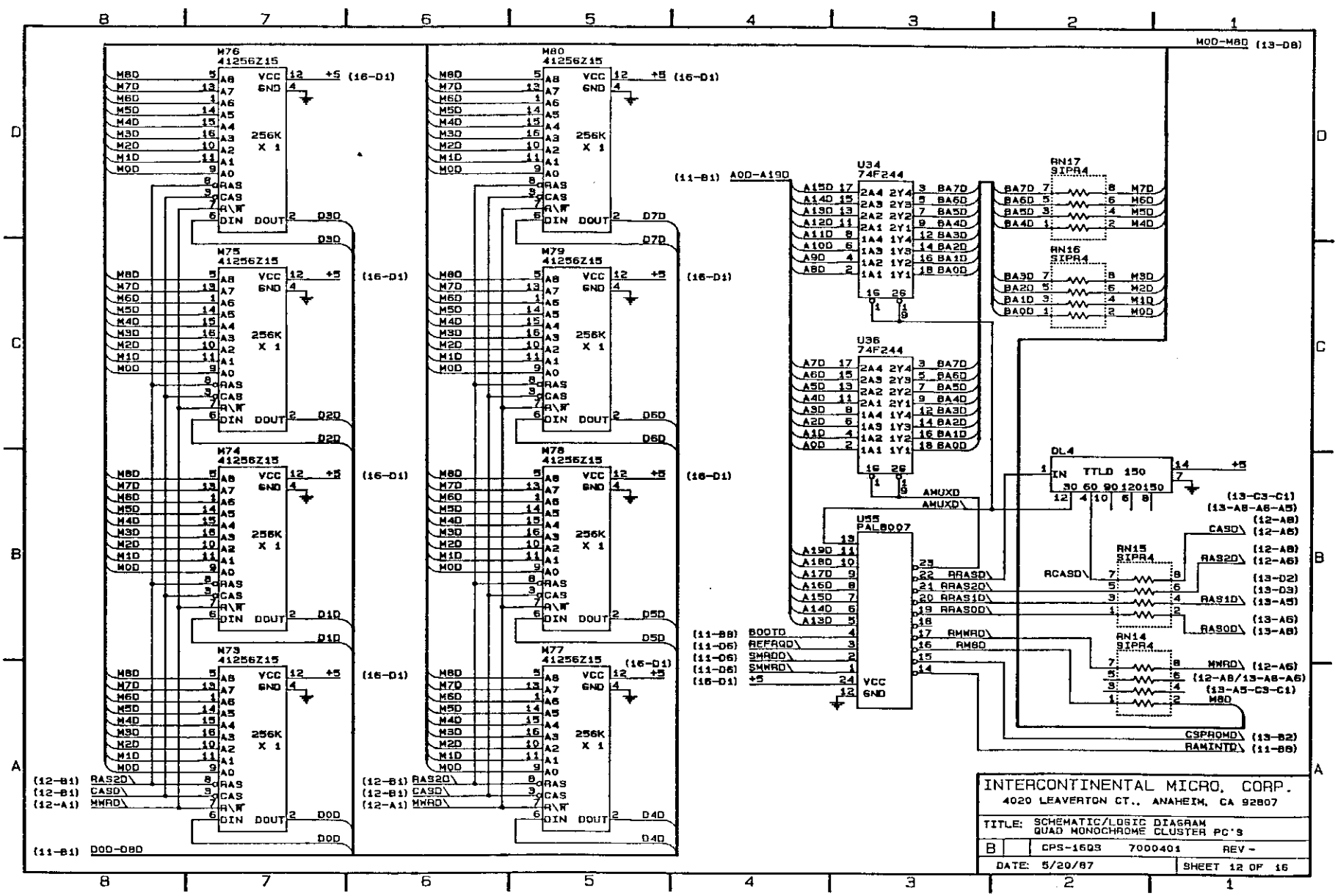
M60 41256Z15 (16-D1)
M59 41256Z15 (16-D1)
M58 41256Z15 (16-D1)
M57 41256Z15 (16-D1)
M64 41256Z15 (16-D1)
M63 41256Z15 (16-D1)
M62 41256Z15 (16-D1)
M61 41256Z15 (16-D1)
M68 41256Z15 (16-D1)
M67 41256Z15 (16-D1)
M66 41256Z15 (16-D1)
M65 41256Z15 (16-D1)
M70 41256Z15 (16-D1)
M69 41256Z15 (16-D1)
M72 41256Z15 (16-D1)
M71 41256Z15 (16-D1)
VCC +5
GND
256K X 1
A0-A8
RAS
CAS
R\W
DIN DOUT
(9-B1) RAS0C\
(9-B1) CASC\
(9-A1) MWRC\
(8-B1) D0C-D7C
RAS1C\
U46 AM27S29
(8-B1) A0C-A19C
(9-A1) CSPROMC\
INTERCONTINENTAL MICRO. CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807
TITLE: SCHEMATIC/LOGIC DIAGRAM
QUAD MONOCHROME CLUSTER PC'S
B CPS-1609 7000401 REV -
DATE: 5/20/87
SHEET 10 OF 16


U52
UPD70208
U44
74LS373
U51
74LS373
U43
74LS245
U53
PCMSC-86
MASTER
SLAVE
INTERCONTINENTAL MICRO, CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807
TITLE: SCHEMATIC/LOGIC DIAGRAM
QUAD MONOCHROME CLUSTER PC'S
B
CPS-1605
7000401
REV -
DATE: 5/20/87
SHEET 11 OF 16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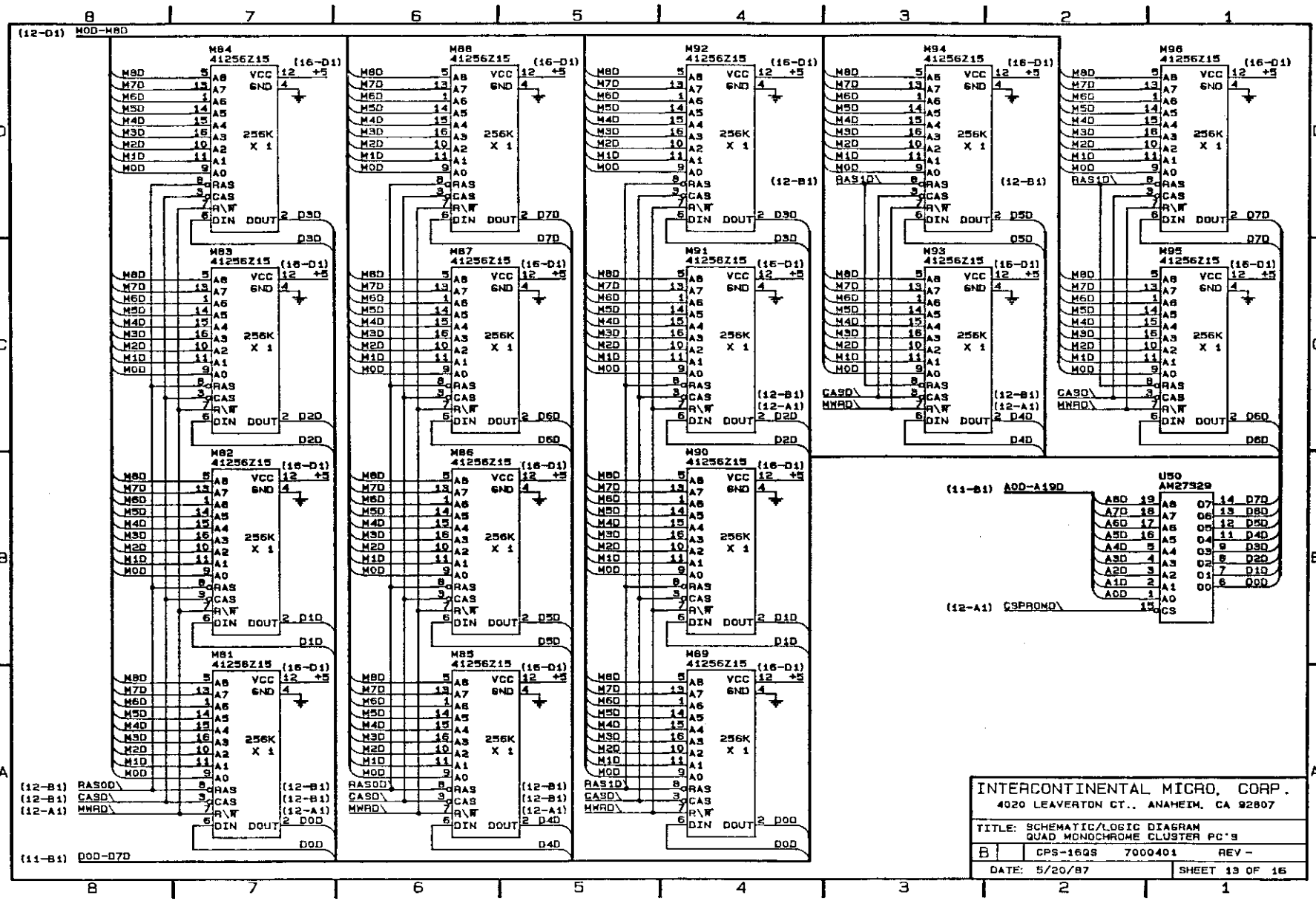
41256Z15
M75
41256Z15
M74
41256Z15
M73
41256Z15
M80
41256Z15
M79
41256Z15
M78
41256Z15
M77
41256Z15
256K X 1
M0D-M8D (13-D8)
(11-B1) A0D-A19D
U34
74F244
U36
74F244
U55
PAL8007
DL4
TTLD 150
RN17
SIPR4
RN16
SIPR4
RN15
SIPR4
RN14
SIPR4
AMUXD
AMUXD\
CASD\ (12-A6)
RAS2D\ (12-A8)
RAS1D\ (13-A5)
RAS0D\ (13-A8)
MWRD\ (12-A6)
M8D
CSPROMD\ (13-B2)
RAMINTD\ (11-B8)
INTERCONTINENTAL MICRO. CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807
TITLE: SCHEMATIC/LOGIC DIAGRAM
QUAD MONOCHROME CLUSTER PC'S
CPS-1603 7000401 REV -
DATE: 5/20/87
SHEET 12 OF 16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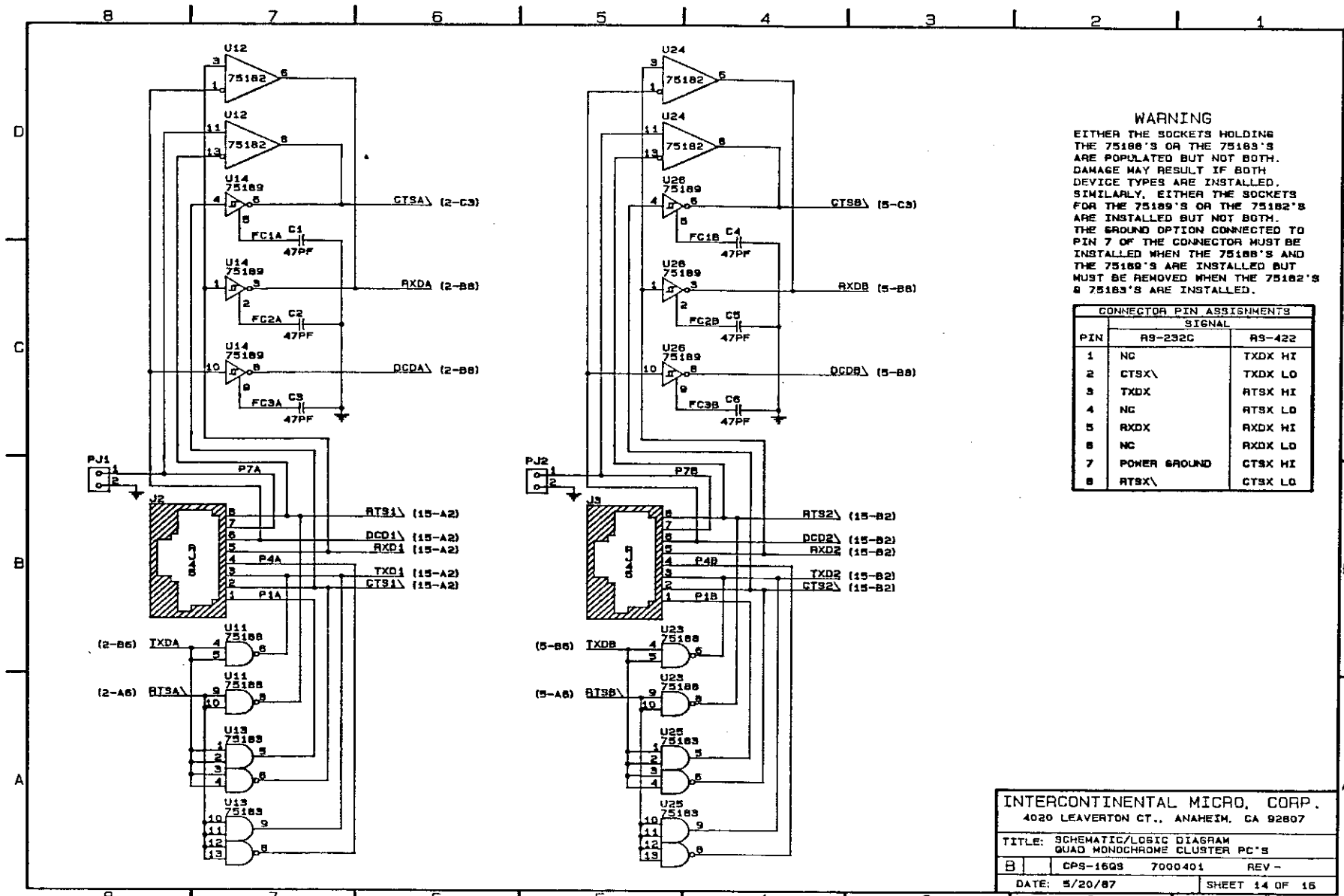
M84 41256Z15 (16-D1)
M83 41256Z15 (16-D1)
M82 41256Z15 (16-D1)
M81 41256Z15 (16-D1)
M88 41256Z15 (16-D1)
M87 41256Z15 (16-D1)
M86 41256Z15 (16-D1)
M85 41256Z15 (16-D1)
M92 41256Z15 (16-D1)
M91 41256Z15 (16-D1)
M90 41256Z15 (16-D1)
M89 41256Z15 (16-D1)
M94 41256Z15 (16-D1)
M93 41256Z15 (16-D1)
M96 41256Z15 (16-D1)
M95 41256Z15 (16-D1)
256K X 1
VCC GND
DIN DOUT
RAS CAS R\W
(12-B1) RAS0D\
(12-B1) CAS0\
(12-A1) MWR0\
(11-B1) D0D-D7D
(12-B1) RAS1D\
(12-B1) CAS1\
(12-A1) MWR1\
U50 AM27S29
(11-B1) A0D-A19D
(12-A1) C9PR0MD\
INTERCONTINENTAL MICRO, CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807
TITLE: SCHEMATIC/LOGIC DIAGRAM
QUAD MONOCHROME CLUSTER PC'S
B CPS-1603 7000401 REV -
DATE: 5/20/87
SHEET 13 OF 16



WARNING

EITHER THE SOCKETS HOLDING THE 75188'S OR THE 75189'S ARE POPULATED BUT NOT BOTH. DAMAGE MAY RESULT IF BOTH DEVICE TYPES ARE INSTALLED. SIMILARLY, EITHER THE SOCKETS FOR THE 75189'S OR THE 75182'S ARE INSTALLED BUT NOT BOTH. THE GROUND OPTION CONNECTED TO PIN 7 OF THE CONNECTOR MUST BE INSTALLED WHEN THE 75188'S AND THE 75189'S ARE INSTALLED BUT MUST BE REMOVED WHEN THE 75182'S & 75183'S ARE INSTALLED.

CONNECTOR PIN ASSIGNMENTS

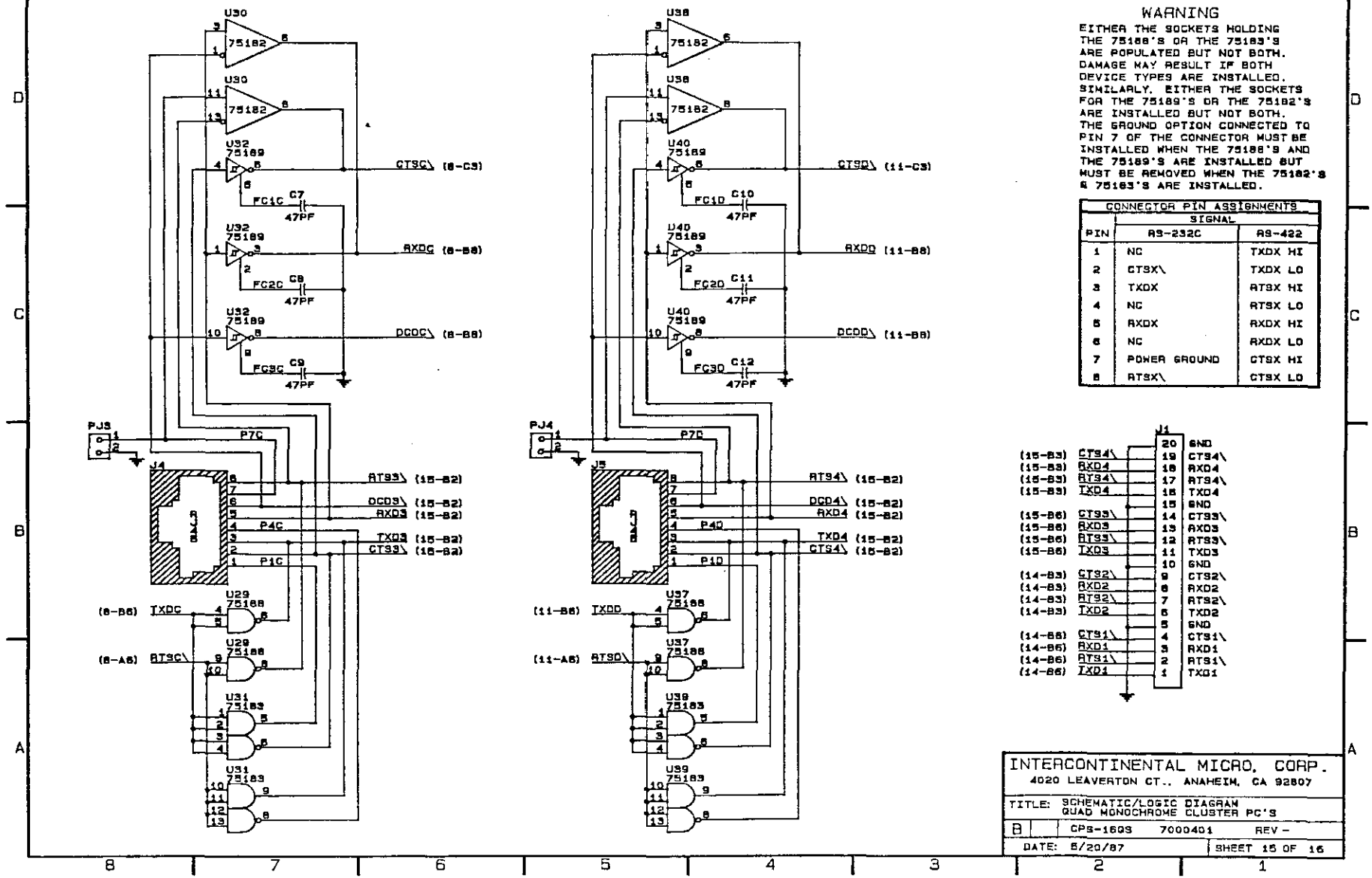
PIN	SIGNAL RS-232C	RS-422
1	NC	TXDX HI
2	CTSX\	TXDX LO
3	TXDX	RTSX HI
4	NC	RTSX LO
5	RXDX	RXDX HI
6	NC	RXDX LO
7	POWER GROUND	CTSX HI
8	RTSX\	CTSX LO

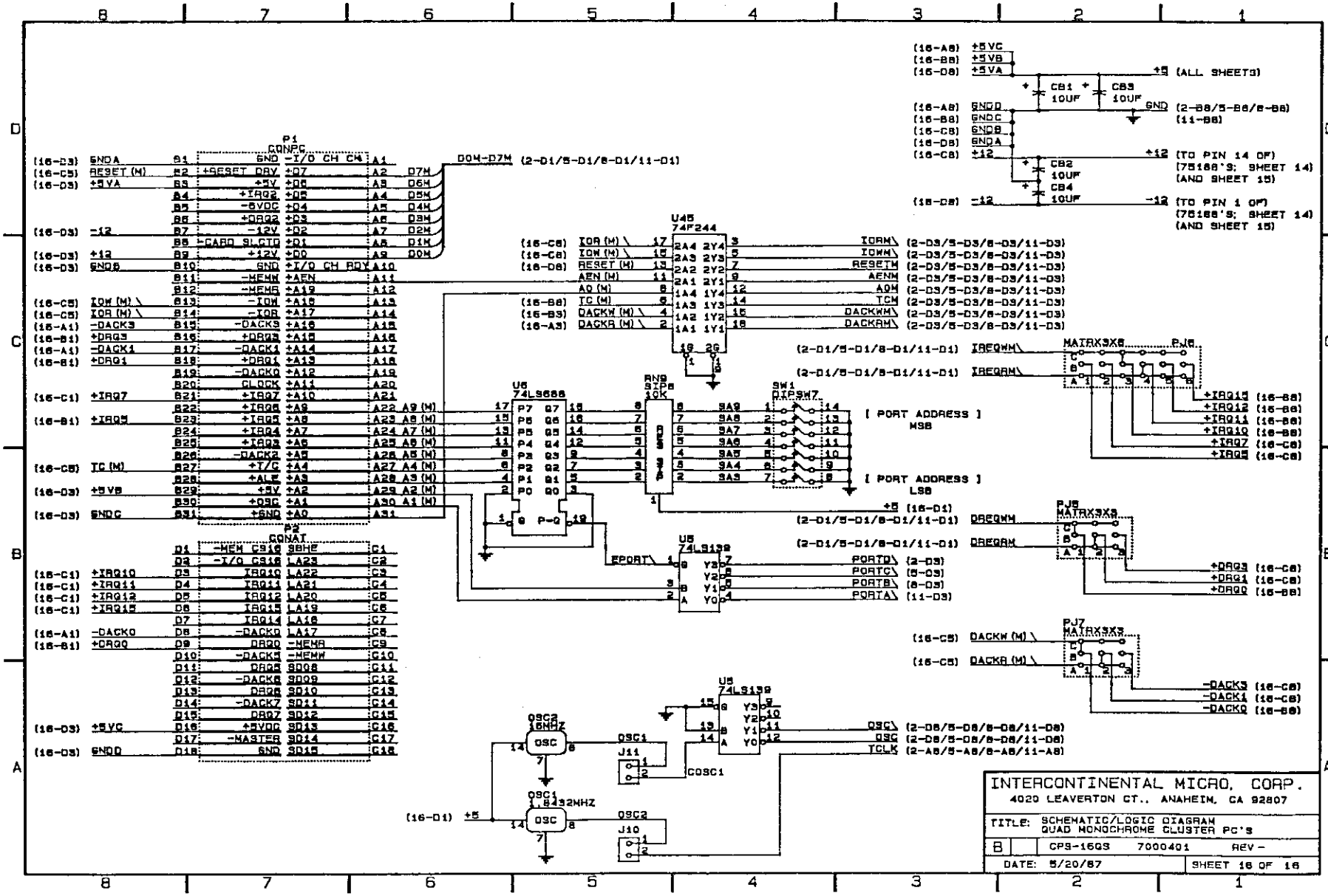
INTERCONTINENTAL MICRO, CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807

TITLE: SCHEMATIC/LOGIC DIAGRAM
QUAD MONOCHROME CLUSTER PC'S

B | CPS-16Q8 7000401 REV -

DATE: 5/20/87 | SHEET 14 OF 16

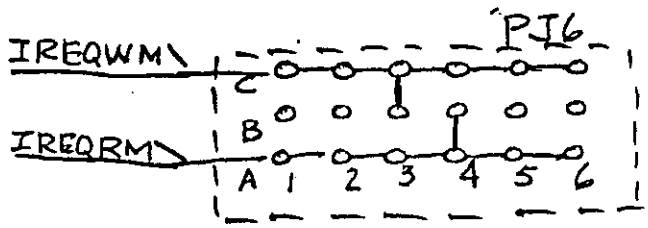

U30
75182
U30
75182
U32
75189
CTSC\ (8-C3)
FC1C C7
47PF
U32
75189
RXDC (8-B8)
FC2C C8
47PF
U32
75189
DCDC\ (8-B8)
FC3C C9
47PF
PJ3
P7C
J4
RTS3\ (15-B2)
DCD3\ (15-B2)
RXD3 (15-B2)
P4C
TXD3 (15-B2)
CTS3\ (15-B2)
P1C
U29
75188
(8-B6) TXDC
U29
75188
(8-A6) RTSC\
U31
75183
U31
75183
U38
75182
U38
75182
U40
75189
CTSD\ (11-C3)
FC1D C10
47PF
U40
75189
RXDD (11-B8)
FC2D C11
47PF
U40
75189
DCDD\ (11-B8)
FC3D C12
47PF
PJ4
P7D
J5
RTS4\ (15-B2)
DCD4\ (15-B2)
RXD4 (15-B2)
P4D
TXD4 (15-B2)
CTS4\ (15-B2)
P1D
U37
75188
(11-B6) TXDD
U37
75188
(11-A6) RTSD\
U39
75183
U39
75183
WARNING
EITHER THE SOCKETS HOLDING THE 75188'S OR THE 75183'S ARE POPULATED BUT NOT BOTH. DAMAGE MAY RESULT IF BOTH DEVICE TYPES ARE INSTALLED. SIMILARLY, EITHER THE SOCKETS FOR THE 75189'S OR THE 75182'S ARE INSTALLED BUT NOT BOTH. THE GROUND OPTION CONNECTED TO PIN 7 OF THE CONNECTOR MUST BE INSTALLED WHEN THE 75188'S AND THE 75189'S ARE INSTALLED BUT MUST BE REMOVED WHEN THE 75182'S & 75183'S ARE INSTALLED.
CONNECTOR PIN ASSIGNMENTS
PIN | SIGNAL RS-232C | SIGNAL RS-422
1 | NC | TXDX HI
2 | CTSX\ | TXDX LO
3 | TXDX | RTSX HI
4 | NC | RTSX LO
5 | RXDX | RXDX HI
6 | NC | RXDX LO
7 | POWER GROUND | CTSX HI
8 | RTSX\ | CTSX LO
J1
(15-B3) CTS4\ 19 CTS4\
(15-B3) RXD4 18 RXD4
(15-B3) RTS4\ 17 RTS4\
(15-B3) TXD4 16 TXD4
20 GND
15 GND
(15-B6) CTS3\ 14 CTS3\
(15-B6) RXD3 13 RXD3
(15-B6) RTS3\ 12 RTS3\
(15-B6) TXD3 11 TXD3
10 GND
(14-B3) CTS2\ 9 CTS2\
(14-B3) RXD2 8 RXD2
(14-B3) RTS2\ 7 RTS2\
(14-B3) TXD2 6 TXD2
5 GND
(14-B6) CTS1\ 4 CTS1\
(14-B6) RXD1 3 RXD1
(14-B6) RTS1\ 2 RTS1\
(14-B6) TXD1 1 TXD1
INTERCONTINENTAL MICRO, CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807
TITLE: SCHEMATIC/LOGIC DIAGRAM QUAD MONOCHROME CLUSTER PC'S
B CPS-1603 7000401 REV -
DATE: 8/20/87
SHEET 15 OF 16


P1
CONPC
P2
CONAT
U45
74F244
U6
74LS688
RN9
SIP8
10K
SW1
DIPSW7
[PORT ADDRESS]
MSB
[PORT ADDRESS]
LSB
U5
74LS139
OSC2
16MHZ
OSC1
1.8432MHZ
PJ6
MATRX3X8
PJ7
MATRX3X3
CB1
10UF
CB3
10UF
CB2
10UF
CB4
10UF
INTERCONTINENTAL MICRO, CORP.
4020 LEAVERTON CT., ANAHEIM, CA 92807
TITLE: SCHEMATIC/LOGIC DIAGRAM
QUAD MONOCHROME CLUSTER PC'S
B
CPS-16QS 7000401 REV -
DATE: 5/20/87
SHEET 16 OF 16

ICM	ENGINEERING CHANGE ORDER		ECO NO. 0012
		CURRENT REVISION	SHEET 2 OF 2

CHANGE DESCRIPTION CONTINUED:

Sheet 16: WAS
Zone C2



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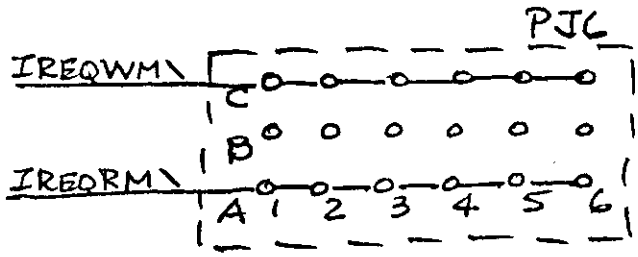

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A2 - B2 &
B2 - C2.

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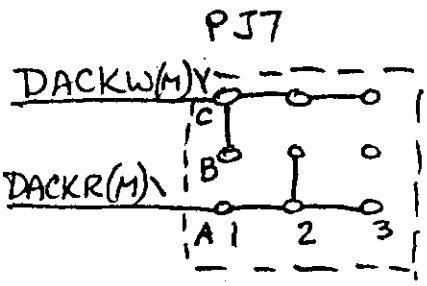
Zone A2



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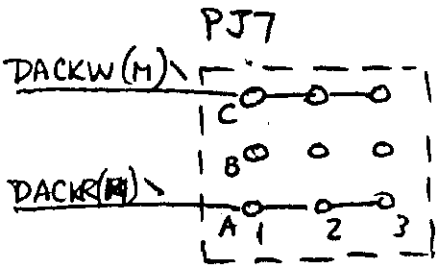


Wire wrap
A3 - B3 &
B3 - C3

ICM

ENGINEERING CHANGE ORDER

ECO NO. 0012

SHEET 1 OF 2 SHEETS

DOCUMENT TITLE: SCHEMATIC/LOGIC DIAGRAM CPS-16QS

DOCUMENT NO.: 7000401

REVISION FROM: — TO: A. SIZE: B

NEXT ASSEMBLY DOC. NO.

TOP ASSEMBLY DOC. NO.

OTHER DWGS

REASON FOR ENGINEERING CHANGE ORDER

DRAFTING ERROR		REDESIGN	X	EXPLANATION: TO COMPLY WITH MOST COMMONLY USED CONFIGURATION.
DESIGN ERROR		VENDOR REQUEST		
CUSTOMER REQUEST		OTHER (EXPLAIN)		

ACTION REQUIRED BY PRODUCTION CONTROL

EFFECTIVITY OF CHANGE		DISPOSITION OF PARTS/SOFTWARE					
		PARTS IN PROCESS		PARTS IN STOCK		PARTS IN NEXT ASSY.	
AT ONCE WITH NECESSARY PROD. DELAY	X	USE AS IS		USE AS IS		USE AS IS	
AS SOON AS POSSIBLE — NO PROD. DELAY		REWORK	X	REWORK	X	REWORK	X
RETROFIT		SCRAP		SCRAP		SCRAP	
NEXT PRODUCTION RUN		SEE NOTE		SEE NOTE		SEE NOTE	
UPON DEPLETION OF EXISTING PARTS							
NO EFFECT ON PRODUCTION							

SERIAL NO. EFFECTIVITY

NSTRUCTIONAL MANUAL TO BE HANGED? YES ☐ NO ☐

NOTES:

APPROVALS

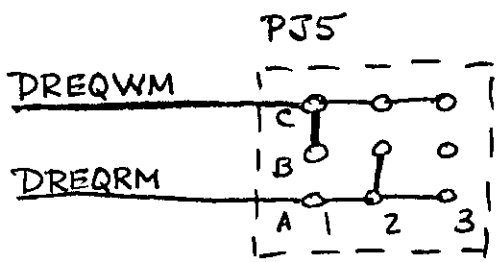
ORIGINATOR R. Bell	DATE 11/18/87
DRAFTING	DATE
MFG. MGR.	DATE
MFG. ENGR.	DATE
PROJ. ENGR.	DATE
DEPT.	
QC ENGR.	DATE
ENGR. MGR.	DATE
COORDINATE WITH ECO'S 0013	

DEPT. DISTRIBUTION:

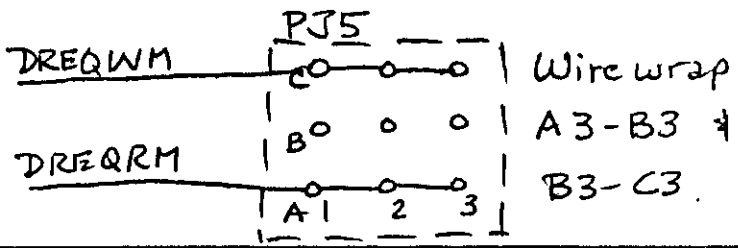
ENGINEERING
MANUFACTURING
OPERATIONS

CHANGE DESCRIPTION:

Sheet 16: WAS:
Zone B2.



IS:



INCORPORATED BY: DATE:

ICM

ENGINEERING CHANGE ORDER

ECO NO. 0013

SHEET 1 OF ___ SHEETS

DOCUMENT TITLE: PARTS LIST CPS-16QS

DOCUMENT NO.: 7000432

REVISION FROM: — TO: A

SIZE

REASON FOR ENGINEERING CHANGE ORDER

DRAFTING ERROR		REDESIGN	X	EXPLANATION: To comply with most commonly used configuration.
DESIGN ERROR		VENDOR REQUEST		
CUSTOMER REQUEST		OTHER (EXPLAIN)		

NEXT ASSEMBLY DOC. NO.

TOP ASSEMBLY DOC. NO.

OTHER DWGS

ACTION REQUIRED BY PRODUCTION CONTROL

EFFECTIVITY OF CHANGE		DISPOSITION OF PARTS/SOFTWARE	PARTS IN PROCESS	PARTS IN STOCK	PARTS IN NEXT ASSY.
AT ONCE WITH NECESSARY PROD. DELAY	X	USE AS IS			
AS SOON AS POSSIBLE — NO PROD. DELAY		REWORK	X	X	X
RETROFIT		SCRAP			
NEXT PRODUCTION RUN		SEE NOTE			
UPON DEPLETION OF EXISTING PARTS					
NO EFFECT ON PRODUCTION					

SERIAL NO. EFFECTIVITY

INSTRUCTIONAL MANUAL TO BE CHANGED? YES ☐ NO ☐

NOTES:

APPROVALS

ORIGINATOR	DATE 11/18/87
DRAFTING	DATE
MFG. MGR.	DATE
MFG. ENGR.	DATE
PROJ. ENGR.	DATE
DEPT.	
QC ENGR.	DATE
ENGR. MGR.	DATE

COORDINATE WITH ECO'S 0012

DEPT. DISTRIBUTION:

Engineering
Manufacturing
Operations.

CHANGE DESCRIPTION:

					Qty
ADD:	929834-01-3	1x3	Jumper Post	PJ5, PJ7	2
	929836-01-3	2x3	Jumper Post	PJ5, PJ8.	2
	929834-01-6	1x6	Jumper Post	PJ6	1
	929836-01-6	2x6	Jumper Post	PJ6	1
WAS:	4/40 x 1/4 SCREW				2
IS:	4/40 x 3/16 SCREW				2
ADD:	#4 WASHER				2.

INCORPORATED BY: DATE: